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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/574,639	05/18/2000	Phil Rich	Q00-1057-US1	8105
32093	7590	04/26/2005	EXAMINER	
HANSRA PATENT SERVICES 4525 GLEN MEADOWS PLACE BELLINGHAM, WA 98226			DESTA, ELIAS	
			ART UNIT	PAPER NUMBER
			2857	

DATE MAILED: 04/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/574,639

Applicant(s)

RICH, PHIL

Examiner

Elias Desta

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— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on **18 May 2000**.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) **1-40** is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) **1-31 and 36-40** is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☒ Claim(s) **32-35** is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Detailed Action

Abstract

1. The abstract is objected to because of the following minor informality:
 - Page 40, lines 7 and 9: the phrase "said data" is indefinite. Use the actual phrase, such as "transferring data" or "required data" wherever is appropriate. Avoid the word "said" in the abstract for better clarity.
- Correction is required.

Specification

2. The specification is objected to because of the following minor informalities:
 - Page 2, lines 5-16: the paragraph needs to be revised for clarity and better readability. For instance, the sentence on lines 9-11 is not clear and comprehensible.

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objection

3. Claims 32-35 are objected to because of the following minor informalities:

With regard to claim 32, the claim cannot depend on itself, hence 33-35 are objected to as being dependent upon a objected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Appropriate dependency and corrections are required.

Allowance

4. Claims 1-31 and 36-40 are allowed. The following is an examiner's statement of reasons for allowance:

In reference to claims 1, 23 and 37: Hanson (U.S. Patent 6,378,013) teaches a system for assessing performance of a device, such as a hard drive (see Hanson, Fig. 3 and column 2, lines 21-44). The method includes acts of establishing a virtual drive. The processor is configured to transfer data between the virtual drive to the hard drive subsystem, and measuring the transfer rate of the subsystem. Another embodiment of the system includes a program storage device storing instruction when executed by the computer perform a method of measuring the performance of the hard drive in a computer.

However, Hanson does not teach that the system specifies more or more different required data transfer rate. The claimed invention further includes a method that measures the actual data transfer rate for each access pattern and determines performance of the storage device in relation to at least one required data transfer rate as a function of the required data transfer rate and the actual data transfer time of data for a given access pattern.

Citation of pertinent prior art:

- Srikrishna et al. (IEEE Article, 'Predicting Track Mis-registration (TMR) From Disk Vibration of Alternate Substrate Material') teaches a method of quantitative measure for closed loop TMR due to disk vibration.
- Pentakalos et al. (IEEE Article, 'Analytical Performance Modeling of Hierarchical Mass Storage Systems') teaches a queuing network model that can be used to carry out capacity planning studies.
- Getreuer (U.S. Patent 6,741,529) teaches method and apparatus for moving carriage assembly from initial position to target position and optical disc system.
- Smith et al. (U.S. Patent 6,546,456) teaches method and apparatus for operating vehicle mounted disk drive storage device.
- Klein (U.S. Patent 5,951,700) teaches method of computer system usage determination based on hard disk drive activity.
- Liu (U.S. Patent 5,768,617) teaches intelligent hardware for automatically reading and writing multiple sectors of data between a computer bus and a disk drive.
- Shimizu et al. (U.S. Patent 5,383,068) teaches head position recognition method, a speed calculation method, and a head movement speed control device.

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The remaining claims are dependent upon claims 1, 23 and 27 and contain further limitations.

Conclusion

5. This application is in condition for allowance except for the objections to the abstract, specification and claims as noted above.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire TWO MONTHS from the mailing date of this letter.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elias Desta whose telephone number is (571)-272-2214. The examiner can normally be reached on M-Thu (8:30-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on (571)-272-2216. The fax phone numbers for the organization where this application or proceeding is assigned are (703)-308-5841 for regular communications and (703)-308-5841 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-308-1782.

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Elias Desta
Examiner
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-ed

February 16, 2005

